

REMARKS

Claims 1 through 19 are pending in this application. All claims have been rejected. Favorable reconsideration and withdrawal of the claim rejections in view of the following comments are respectfully solicited.

Claims 1, 5 through 7 and 16 through 19 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 5,117,301 (Tsumura). A detailed reading of the claim elements on Tsumura is presented at pages 2-5 of the Office Action. Figs. 7 and 9 and column 7, line 53 to column 10, line 62 have been relied upon to conclude that Tsumura discloses all the features recited in claims 1, 6 and 18. Claims 2 through 4 and 8 through 15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent 6,449,406 (Fan). Fan has been relied upon for teaching a digital micro-actuator provided on the rear side of a transparent plate reflection plane with a control plane responsive to an applied signal to change light direction. The Office Action has concluded that it would have been obvious to incorporate the reflection condition control devices of Fan in the Tsumura system. It is respectfully submitted that conclusions of the Office Action are in error.

Independent claims 1 and 6 both recite, *inter alia*, the following:

the modulator including
a plurality of reflection condition control devices arranged
on a reflection plane of the retroreflector and capable of controlling
optical reflection independently of each other and
a driver for separately controlling each of the reflection
condition control devices according to the transmission signal

Independent claim 18 recites, *inter alia*, the following:

A photoreceiver receiving a bundle of lights containing a
plurality of light beams modulated respectively by separate signals
and having a plurality of photoreceptors arranged correspondingly
to an arrangement of the plurality of light beams

The claimed modulator corresponds to reflection plane 52 (Fig. 2), having pixels 58 arranged thereon. Figs. 4-6 illustrate operation of the device in more detail. The modulator is described at pages 7 to 9 of the specification.

Tsumura's transmitting device 20, shown in Fig. 7 includes: a characteristic information signal outputting device 24 for outputting the information characteristic of that position, and a light beam reflecting device 88 for reflecting and modulating the light beam responsive to the characteristic information signal (column 7, line 64 to col. 8, line 4). The light beam reflecting device 88 includes a corner cube 106, a liquid crystal shutter 108 provided on one of the reflecting surfaces of the corner cube 106, and a liquid crystal driver 110 (column 9, line 66 to column 10, line 5). The driver 110 drives the liquid crystal shutter 108 in accordance with the characteristic information signal. In response, the light beam reflection on the reflecting surface where the liquid crystal shutter 108 is provided (column 10, lines 6 to 11).

Operation of the light beam reflecting device 44 is described at column 10, lines 12 to 23. When the characteristic information signal is High, the light beam is reflected on the surface and otherwise, it is not. As can be seen from this description, Tsumura's transmitting device is a "single-channel" transmitting device rather than a "multi-channel" one as recited in claims 1, 6 and 18. Tsumura does not disclose or even remotely suggest a modulator that includes "a plurality of reflection condition control devices and a driver for separately controlling each of the reflection condition control devices."

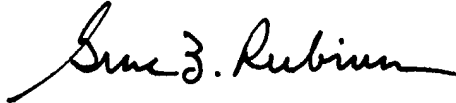
It is submitted, therefore, that claims 1, 5 through 7 and 16 through 19 are not anticipated by Tsumura and that the rejection thereof 35 U.S.C. § 102(b) should be withdrawn. Fan has been relied upon for teaching a digital micro-actuator provided on the rear side of a transparent plate reflection plane, not for teaching the plurality of reflection condition control devices and

associated drivers as per the claimed requirements. The teachings of both references, considered in combination, would not have led a person of ordinary skill in the art to the invention recited in claims 1 through 19. It is submitted, therefore, that the rejection of claims 2 through 4 and 8 through 15 have been rejected under 35 U.S.C. § 103(a) should be withdrawn.

Accordingly, allowance of the application is respectfully solicited. To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Gene Z. Robinson". The signature is fluid and cursive, with the first name "Gene" being the most prominent.

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